

UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF NEW YORK

| | |
|---|---------------------------------------|
| In re Terrorist Attacks on September 11, 2001 | 03 MDL 1570 (GBD)(SN) ECF Case |
|---|---------------------------------------|

This document relates to:

Ashton, et al. v. al Qaeda Islamic Army, et al., 02-cv-6977 (GBD) (SN)

**DECLARATION OF PLAINTIFF KRISTEN BREITWEISER IN SUPPORT
OF DEFAULT JUDGMENT APPLICATION AGAINST THE TALIBAN**

Kristen Breitweiser, pursuant to 28 U.S.C. § 1746, declares under the penalty of perjury under the laws of the United States of America, that the following is true and correct:

1. I am the court-appointed personal representative of the Estate of Ronald M. Breitweiser, who perished at the World Trade Center as a result of the terrorist attacks on September 11, 2001.

2. I submit this Declaration on my own behalf as the surviving spouse of Ronald M. Breitweiser, and on behalf of the only other New Jersey State designated “heir” of my late husband, our one child, Caroline Breitweiser.

3. I can affirm to the Court that my deceased husband lived with me and our one child at a private home at 268 Monmouth Avenue, Atlantic Highlands, NJ 07716 at the time of his death. I can further affirm that my child and I were the only “immediate family members” living with my husband and that no other family member lived with us (or was dependent on my husband – financially or emotionally) at the time of his death.

4. For the foregoing reasons, I ask that the Court to deem my child and me as the only “immediate family members” of Ronald M. Breitweiser.

5. My attorney (John F. Schutty) has advised me that under New Jersey State estate administration law, when a decedent is survived by a spouse and a child, they are considered the decedent's only "legal heirs" (New Jersey estate administration law explicitly denies parents and siblings of a decedent any wrongful death damages under such circumstances).

6. My attorney has completed a search of the MDL docket and advised me about the substantial wrongful death damages that were awarded against the Islamic Republic of Iran ("Iran") and in favor of many "non-heirs" under applicable state law.

7. I was dismayed to learn how large the awards were to the non-heirs and even more dismayed to learn how these judgments affected/reduced the distribution of money from the U.S. Victims of State Sponsored Terrorism Fund ("USVSST"), a fund with limited assets, to me and my child.

8. For example, I have reviewed the accompanying Declaration of Patricia Ryan and the Declaration of Lisa O'Brien (MDL ECF#8961) and was shocked to see the large awards made to non-heirs against the Islamic Republic of Iran and the damage awards now sought by non-heirs against the Taliban.

9. Upon information and belief, awards against Iran were granted to non-heirs without regard to whether the statute of limitations of the Foreign Sovereign Immunities Act was satisfied (a 10-year statute of limitations). And non-heirs and heirs then proceeded into the USVSST where a limited amount of funds were available to be shared amongst claimants. Undeniably, my child and I were hurt by the award of wrongful death damages to non-heirs and the resulting payments by the USVSST.

10. Again, a limited fund of money (if any) is expected to be available to all plaintiffs making claims against the Taliban. Again, awards to non-heirs, and those who have filed

amongst claimants. Undeniably, my child and I were hurt by the award of wrongful death damages to non-heirs and the resulting payments by the USVSST.

10. Again, a limited fund of money (if any) is expected to be available to all plaintiffs making claims against the Taliban. Again, awards to non-heirs, and those who have filed untimely claims, will, at a minimum, reduce the recoveries of my child and me from the Taliban and any limited fund of money that may be available.

11. I expressly object to the Court making wrongful death awards to "non-heirs."

12. I also object to the Court issuing awards to plaintiffs who have filed claims after the statute of limitations has expired. This Court apparently has previously determined that one wrongful death lawsuit, filed by any family member, protects any subsequent wrongful death lawsuit filed by any other family member of the decedent, against the statute of limitations. *See, e.g.*, ECF MDL#5095 at 1, 5096 at 1 and 5097 at 1. Please do not allow non-heirs to "piggy-back" on timely legal actions, and then reduce the wrongful death damage money paid to my late husband's heirs.

Dated: New York, New York

April 20, 2023

I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct.



Kristen Breitweiser

EXHIBIT A: KRISTEN BREITWEISER DECLARATION

| Estate | Immediate Family Members (Heirs) | Relationship | Solatium Damages | Conscious Pain & Suffering | Economic Loss | TOTALS |
|---|----------------------------------|--------------|------------------|----------------------------|-----------------|------------------------|
| Estate of Ronald M. Breitweiser | Breitweiser, Kristen | Spouse/PR | \$12,500,000.00 | \$2,000,000.00 | \$45,385,507.00 | \$59,885,507.00 |
| | Breitweiser, Caroline | Child | \$ 8,500,000.00 | | | \$ 8,500,000.00 |
| Total Judgment to Personal Representative for Entry of Partial Final Judgments Against Taliban | | | | | | \$68,385,507.00 |

APPRAISAL OF ECONOMIC LOSS

Ronald Breitweiser

Prepared for: Jeanne M. O'Grady, Esq.
SPEISER KRAUSE
Counsellors at Law
800 Westchester Avenue
Suite South 608
Rye Brook, NY 10573

Prepared by: Gary M. Crakes, PhD

June 28, 2017

Table of Contents

| <u>Exhibit</u> | <u>page</u> |
|--|-------------|
| Letter of transmittal | 1 |
| Discussion | 2,3 |
| I Summary of appraisal | 4 |
| II Work-life and life expectancy | 5 |
| III Average hourly earnings of production workers...since 1932 | 6 |
| IV Federal Income Tax Schedules for Individuals: Tax tables, standard deductions and personal exemptions, 2016 and 2017 (table) | 7 |
| V Taxable returns: Adjusted gross income (AGI), income tax and tax ratio, 1947-2014 (table) | 8 |
| VI Employer Costs for Employee Compensation: September 2016, U. S. Department of Labor, Bureau of Labor Statistics, December, 2016 (table) | 9 |
| VII Estimated annual value of household services (table) | 10 |
| Gary M. Crakes: Curriculum vitae | |

MAHER, CRAKES AND ASSOCIATES

ECONOMIC CONSULTANTS
860 WARD LANE
CHESHIRE, CONNECTICUT 06410

(203) 272-1205
FAX: (203) 250-8452

JOHN MAHER, PhD
1925 - 2005
GARY M. CRAKES, PhD

June 28, 2017

RE: Ronald Breitweiser

Jeanne M. O'Grady, Esq.
SPEISER KRAUSE
Counsellors at Law
800 Westchester Avenue
Suite 608
Rye Brook, NY 10573

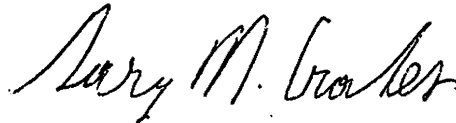
Dear Ms. O'Grady:

The following report on the economic loss of the above named is an objective estimate of the loss in this case, measured as scientifically and accurately as the data permit.

If you have questions about calculations or concepts or feel that additional aspects should be explored, please contact us. Exhibit I and II in this report are prepared to be suitable as enlargements for use at trial.

If the case is not settled, please schedule time for appearance at trial sufficiently in advance that we may plan accordingly.

Respectfully submitted,



Gary M. Crakes, PhD

GMC:dc

Discussion of appraisal: Ronald Breitweiser

Ronald Breitweiser was born (1962.59) and died September 11, 2001 (2001.70) at age 39.11 years with life expectancy of 37.50 years and work-life to age 70 of 30.89 years. See Exhibit II.

In this appraisal of the economic loss of earning capacity, we have calculated the lifetime earnings of Ronald Breitweiser with work-life to age 70 based on an average annual earnings rate of \$2,400,000. The average annual earnings rate is based upon the report of Dr. Thomas R. Kershner dated January 29, 2003. In that report, Dr. Kershner relied on numerous interviews he conducted of Mr. Breitweiser's colleagues and supervisors, as well as individuals who had extended employment offers to Mr. Breitweiser prior to his death. The annual earnings rate employed as the starting point in the present report is derived from the extensive analysis of Dr. Kershner.

Calculation of the value of lifetime earnings based on an average annual earnings rate of \$2,400,000 results in earnings loss for the 16.30 years in the past of \$48,208,464 with adjustment for each year in the past by the annual percentage change in general levels of earnings. Calculation of future discounted earnings assumes that the future average annual rate of growth of earnings will be equal to the discount rate. With this assumption and current estimated annual earnings of \$3,561,192, future discounted earnings are \$51,957,791. Total discounted lifetime earnings based on an average annual earnings rate of \$2,400,000 are \$100,166,255. This value appears as the first entry to the summary, Exhibit I.

Further shown in the summary, Exhibit I, is a deduction for federal, state, and city income taxes of 50.00% of earnings. The percentage for federal income tax was obtained using tax rates for the years in the past and the tax rates from the federal personal income tax schedule displayed in Exhibit IV. (Exhibit V presents historical tax rates from 1947 to 2014 and demonstrates the relatively small percentage point changes in rates over time.) With

the deduction for federal, state, and city income taxes, after-tax discounted economic loss is \$50,083,127.

Next shown in Exhibit I is a deduction of 10% of gross earnings as an allowance for personal maintenance expenses. (See Consumer Expenditures in 2015, U.S. Department of Labor, Bureau of Labor Statistics, April, 2017.) With this deduction, discounted economic loss is \$40,066,501.

Finally, we have included two additional values. First, we have included the value of fringe benefits calculated at 5% of earnings. (For the average benefit payments in the United States, see Exhibit VI with data from the Bureau of Labor Statistics, U.S. Department of Labor.) Second, we have included the value of Ronald Breitweiser's household services. Data for the estimate are presented in Exhibit VII and are derived from "Time Use During the Great Recession", Mark Aguiar, Erik Hurst, and Loukas Karabarbounis, American Economic Review, August, 2013 and wage rates from the Bureau of Labor Statistics, U.S. Department of Labor. Adjustment and application of the appropriate values provides an estimate of discounted loss of \$310,693, canceling future rates of increase by the discount rate. With the addition of these values, discounted economic loss is \$45,385,507. See Exhibit I.

It is our opinion that the discounted economic loss in this case is \$45,385,507.

Summary of appraisal: Ronald Breitweiser

| | <u>Discounted values</u> |
|---|--------------------------|
| I Basic earnings based on 2001 annual earnings rate of \$2,400,000 | \$100,166,255 |
| II Less federal, state, and city income taxes at 50% of earnings | <u>- 50,083,128</u> |
| Subtotal | \$ 50,083,127 |
| III Less personal maintenance at 10% of earnings | <u>- 10,016,626</u> |
| Subtotal | \$ 40,066,501 |
| IV Plus value of fringe benefits | <u>5,008,313</u> |
| Subtotal | \$ 45,074,814 |
| V Plus value of household services | <u>310,693</u> |
| Total net discounted economic loss | \$ 45,385,507 |

WORK-LIFE AND LIFE EXPECTANCY

Ronald Breitweiser

| | <u>Year and fractional equivalent</u> | <u>Number of years</u> |
|-------------------------|---|------------------------|
| A. Date of birth: | | |
| | 1962.59 | |
| B. As of date of death: | | |
| September 11, 2001 | 2001.70 | |
| 1. Age | | 39.11 |
| 2. Work-life to age 70 | | 30.89 |
| 3. Life expectancy | | 37.50 |

Source:

3. National Vital Statistics Reports, 2001,
U. S. Department of Health and Human Services,
National Center for Health Statistics, Volume 52, Number 14,
February 18, 2004.

Exhibit III

TABLE 98. Average Hourly Earnings of Production or Nonsupervisory Workers¹ on Private Nonagricultural Payrolls, by Industry Division, 1932-74

(In dollars)

| Year and month | Total private | Mining | Contract construction | Manufacturing | | | Manufacturing excluding overtime | Transportation and public utilities | Wholesale and retail trade | | | Finance, insurance, and real estate ² | Services |
|----------------|---------------|--------|-----------------------|--------------------|---------------|------------------|----------------------------------|-------------------------------------|----------------------------|-----------|--------|--|----------|
| | | | | Total ³ | Durable goods | Nondurable goods | | | Total | Wholesale | Retail | | |
| 1932..... | | | | 0.441 | 0.492 | 0.412 | | | | | | | |
| 1933..... | | | | .457 | .467 | .419 | | | | | | | |
| 1934..... | | | | .526 | .550 | .505 | | | | | | | |
| 1935..... | | | | .544 | .571 | .520 | | | 0.610 | | | | |
| 1936..... | | | | .550 | .580 | .519 | | | .628 | | | | |
| 1937..... | | | | .617 | .657 | .565 | | | .658 | | | | |
| 1938..... | | | | .620 | .679 | .572 | | | .674 | | | | |
| 1939..... | | | | .627 | .691 | .571 | | | .685 | | | 0.484 | |
| 1940..... | | | | .655 | .716 | .590 | | | .711 | | | .494 | |
| 1941..... | | | | .726 | .799 | .627 | 0.691 | | .763 | | | .518 | |
| 1942..... | | | | .851 | .937 | .709 | .793 | | .828 | | | .539 | |
| 1943..... | | | | .957 | 1.048 | .787 | .881 | | .898 | | | .606 | |
| 1944..... | | | | 1.011 | 1.105 | .844 | .933 | | .948 | | | .653 | |
| 1945..... | | | | 1.016 | 1.090 | .888 | 1.049 | | .990 | | | .699 | |
| 1946..... | | | | 1.075 | 1.144 | .995 | 1.035 | | 1.107 | | | .757 | |
| 1947..... | 1.131 | 1.469 | 1.541 | 1.217 | 1.278 | 1.145 | 1.18 | | 0.940 | 1.229 | 1.140 | 1.140 | |
| 1948..... | 1.225 | 1.664 | 1.713 | 1.328 | 1.395 | 1.250 | 1.29 | | 1.010 | 1.308 | 1.200 | 1.200 | |
| 1949..... | 1.275 | 1.717 | 1.792 | 1.378 | 1.453 | 1.295 | 1.34 | | 1.060 | 1.360 | 1.250 | 1.250 | |
| 1950..... | 1.335 | 1.772 | 1.863 | 1.440 | 1.519 | 1.347 | 1.39 | | 1.100 | 1.427 | 1.340 | 1.340 | |
| 1951..... | 1.45 | 1.93 | 2.02 | 1.55 | 1.65 | 1.44 | 1.51 | | 1.18 | 1.52 | 1.45 | 1.45 | |
| 1952..... | 1.52 | 2.01 | 2.13 | 1.65 | 1.75 | 1.51 | 1.59 | | 1.23 | 1.61 | 1.51 | 1.51 | |
| 1953..... | 1.61 | 2.14 | 2.28 | 1.74 | 1.85 | 1.58 | 1.68 | | 1.30 | 1.70 | 1.58 | 1.58 | |
| 1954..... | 1.65 | 2.14 | 2.39 | 1.78 | 1.90 | 1.62 | 1.73 | | 1.35 | 1.75 | 1.65 | 1.65 | |
| 1955..... | 1.71 | 2.20 | 2.45 | 1.85 | 1.99 | 1.67 | 1.79 | | 1.40 | 1.83 | 1.75 | 1.75 | |
| 1956..... | 1.80 | 2.33 | 2.57 | 1.95 | 2.08 | 1.77 | 1.89 | | 1.47 | 1.94 | 1.80 | 1.80 | |
| 1957..... | 1.89 | 2.46 | 2.71 | 2.05 | 2.19 | 1.85 | 1.99 | | 1.54 | 2.02 | 1.87 | 1.87 | |
| 1958..... | 1.95 | 2.47 | 2.82 | 2.11 | 2.25 | 1.91 | 2.05 | | 1.60 | 2.09 | 1.92 | 1.92 | |
| 1959..... | 2.02 | 2.56 | 2.93 | 2.19 | 2.35 | 1.98 | 2.12 | | 1.65 | 2.18 | 1.97 | 1.97 | |
| 1960..... | 2.09 | 2.61 | 3.08 | 2.25 | 2.43 | 2.05 | 2.20 | | 1.71 | 2.24 | 2.02 | 2.02 | |
| 1961..... | 2.14 | 2.64 | 3.20 | 2.32 | 2.49 | 2.11 | 2.25 | | 1.76 | 2.31 | 2.09 | 2.09 | |
| 1962..... | 2.22 | 2.70 | 3.31 | 2.39 | 2.56 | 2.17 | 2.31 | | 1.83 | 2.37 | 2.17 | 2.17 | |
| 1963..... | 2.28 | 2.75 | 3.41 | 2.45 | 2.63 | 2.22 | 2.37 | | 1.89 | 2.45 | 2.25 | 2.25 | |
| 1964..... | 2.35 | 2.81 | 3.55 | 2.53 | 2.71 | 2.29 | 2.44 | 2.88 | 1.95 | 2.52 | 2.30 | 2.30 | 1.94 |
| 1965..... | 2.45 | 2.92 | 3.70 | 2.61 | 2.79 | 2.36 | 2.51 | 3.03 | 2.03 | 2.61 | 2.37 | 2.37 | 2.05 |
| 1966..... | 2.56 | 3.05 | 3.89 | 2.72 | 2.90 | 2.45 | 2.59 | 3.11 | 2.13 | 2.73 | 2.47 | 2.47 | 2.17 |
| 1967..... | 2.68 | 3.19 | 4.11 | 2.83 | 3.00 | 2.57 | 2.71 | 3.24 | 2.24 | 2.88 | 2.58 | 2.58 | 2.29 |
| 1968..... | 2.85 | 3.35 | 4.41 | 3.01 | 3.19 | 2.74 | 2.88 | 3.42 | 2.40 | 3.05 | 2.75 | 2.75 | 2.42 |
| 1969..... | 3.04 | 3.61 | 4.79 | 3.19 | 3.38 | 2.91 | 3.06 | 3.64 | 2.55 | 3.23 | 2.93 | 2.93 | 2.61 |
| 1970..... | 3.22 | 3.85 | 5.24 | 3.38 | 3.55 | 3.08 | 3.24 | 3.85 | 2.71 | 3.44 | 3.08 | 3.08 | 2.81 |
| 1971..... | 3.44 | 4.06 | 5.69 | 3.57 | 3.79 | 3.28 | 3.44 | 4.21 | 2.86 | 3.67 | 3.27 | 3.27 | 3.02 |
| 1972..... | 3.67 | 4.41 | 6.02 | 3.81 | 4.05 | 3.47 | 3.66 | 4.64 | 3.01 | 3.88 | 3.42 | 3.42 | 3.23 |
| 1973..... | 3.92 | 4.72 | 6.38 | 4.07 | 4.32 | 3.68 | 3.89 | 5.03 | 3.20 | 4.12 | 3.57 | 3.57 | 3.40 |
| 1974..... | 4.22 | 5.20 | 6.76 | 4.40 | 4.68 | 3.98 | 4.23 | 5.40 | 3.47 | 4.49 | 3.81 | 3.81 | 3.74 |

¹ Data relate to production workers in mining and manufacturing; to construction workers in contract construction; and to nonsupervisory workers in transportation and public utilities; wholesale and retail trade; finance, insurance, and real estate; and services.

² Prior data are as follows:

| | | | | | |
|-----------|-------|-----------|-------|-----------|-------|
| 1909..... | 0.191 | 1922..... | 0.482 | 1927..... | 0.544 |
| 1914..... | .221 | 1923..... | .516 | 1928..... | .556 |
| 1919..... | .472 | 1924..... | .541 | 1929..... | .560 |
| 1920..... | .549 | 1925..... | .541 | 1930..... | .546 |
| 1921..... | .509 | 1926..... | .542 | 1931..... | .509 |

³ Excludes data on nonoffice salespersons.

⁴ Beginning 1947, includes data on eating and drinking places.

⁵ 11-month average.

⁶ Prior to January 1956, data were based on the application of adjustment factors to gross average hourly earnings. (For a detailed description see the *Monthly Labor Review*, May 1950, pp. 537-540; reprint available, serial No. R 2020.)

Note: Data include Alaska and Hawaii beginning 1959.

| Private Sector | | | | | Service Industry | | | | |
|----------------|---------|------|---------|------|------------------|------|--------|------|---------|
| 1975 | \$ 4.53 | 1993 | \$11.03 | 2011 | \$19.46 | 1975 | \$4.02 | 1993 | \$10.60 |
| 1976 | 4.86 | 1994 | 11.32 | 2012 | 19.77 | 1976 | 4.31 | 1994 | 10.87 |
| 1977 | 5.25 | 1995 | 11.64 | 2013 | 20.14 | 1977 | 4.65 | 1995 | 11.19 |
| 1978 | 5.69 | 1996 | 12.03 | 2014 | 20.60 | 1978 | 4.99 | 1996 | 11.57 |
| 1979 | 6.16 | 1997 | 12.49 | 2015 | 21.03 | 1979 | 5.36 | 1997 | 12.05 |
| 1980 | 6.66 | 1998 | 13.00 | 2016 | 21.56 | 1980 | 5.85 | 1998 | 12.59 |
| 1981 | 7.25 | 1999 | 13.47 | | | 1981 | 6.41 | 1999 | 13.07 |
| 1982 | 7.68 | 2000 | 14.00 | | | 1982 | 6.92 | 2000 | 13.60 |
| 1983 | 8.02 | 2001 | 14.53 | | | 1983 | 7.30 | 2001 | 14.16 |
| 1984 | 8.33 | 2002 | 14.95 | | | 1984 | 7.64 | 2002 | 14.56 |
| 1985 | 8.58 | 2003 | 15.35 | | | 1985 | 7.95 | 2003 | 14.96 |
| 1986 | 8.76 | 2004 | 15.67 | | | 1986 | 8.16 | 2004 | 15.26 |
| 1987 | 8.98 | 2005 | 16.11 | | | 1987 | 8.49 | 2005 | 15.71 |
| 1988 | 9.29 | 2006 | 16.76 | | | 1988 | 8.88 | 2006 | 16.42 |
| 1989 | 9.66 | 2007 | 17.43 | | | 1989 | 9.39 | 2007 | 17.11 |
| 1990 | 10.19 | 2008 | 18.08 | | | 1990 | 9.71 | 2008 | 17.77 |
| 1991 | 10.50 | 2009 | 18.62 | | | 1991 | 10.05 | 2009 | 18.35 |
| 1992 | 10.76 | 2010 | 19.04 | | | 1992 | 10.33 | 2010 | 18.78 |

Source: Bureau of Labor Statistics, U. S. Department of Labor

**Federal Income Tax Schedules for Individuals: Tax tables,
standard deductions and personal exemptions, 2016 and 2017**

2016

2017

Tax Rates for Married Couples Filing Jointly

| Taxable Income | Rate | Taxable Income | Rate |
|---------------------|--------|---------------------|--------|
| \$0-\$18,550 | 10% | \$0-\$18,650 | 10% |
| \$18,550-\$75,300 | 15% | \$18,650-\$75,900 | 15% |
| \$75,300-\$151,900 | 25% | \$75,900-\$153,100 | 25% |
| \$151,900-\$231,450 | 28% | \$153,100-\$233,350 | 28% |
| \$231,450-\$413,350 | 33% | \$233,350-\$416,700 | 33% |
| \$413,350-\$466,950 | 35% | \$416,700-\$470,700 | 35% |
| Over \$466,950 | 39.60% | Over \$470,700 | 39.60% |

Tax Rates for Individuals Filing Single Returns

| Taxable Income | Rate | Taxable Income | Rate |
|---------------------|--------|---------------------|--------|
| \$0-\$9,275 | 10% | \$0-\$9,325 | 10% |
| \$9,275-\$37,650 | 15% | \$9,325-\$37,950 | 15% |
| \$37,650-\$91,150 | 25% | \$37,950-\$91,900 | 25% |
| \$91,150-\$190,150 | 28% | \$91,900-\$191,650 | 28% |
| \$190,150-\$413,350 | 33% | \$191,650-\$416,700 | 33% |
| \$413,350-\$415,050 | 35% | \$416,700-\$418,400 | 35% |
| Over \$415,050 | 39.60% | Over \$418,400 | 39.60% |

Tax Rates for Individuals Filing as Head of Household

| Taxable Income | Rate | Taxable Income | Rate |
|---------------------|--------|---------------------|--------|
| \$0-\$13,250 | 10% | \$0-\$13,350 | 10% |
| \$13,250-\$50,400 | 15% | \$13,350-\$50,800 | 15% |
| \$50,400-\$130,150 | 25% | \$50,800-\$131,200 | 25% |
| \$130,150-\$210,800 | 28% | \$131,200-\$212,500 | 28% |
| \$210,800-\$413,350 | 33% | \$212,500-\$416,700 | 33% |
| \$413,350-\$441,000 | 35% | \$416,700-\$444,550 | 35% |
| Over \$441,000 | 39.60% | Over \$444,550 | 39.60% |

Tax Rates for Married Individuals Filing Separately

| Taxable Income | Rate | Taxable Income | Rate |
|---------------------|--------|---------------------|--------|
| \$0-\$9,275 | 10% | \$0-\$9,325 | 10% |
| \$9,275-\$37,650 | 15% | \$9,325-\$37,950 | 15% |
| \$37,650-\$75,950 | 25% | \$37,950-\$76,550 | 25% |
| \$75,950-\$115,725 | 28% | \$76,550-\$116,675 | 28% |
| \$115,725-\$206,675 | 33% | \$116,675-\$208,350 | 33% |
| \$206,675-\$233,475 | 35% | \$208,350-\$235,350 | 35% |
| Over \$233,475 | 39.60% | Over \$235,350 | 39.60% |

Standard Deduction

Personal Exemption

| | 2016 | 2017 |
|-------------------|----------|----------|
| Married, joint | \$12,600 | \$12,700 |
| Single | 6,300 | 6,350 |
| Head of household | 9,300 | 9,350 |
| Married, separate | 6,300 | 6,350 |

| 2016 | 2017 |
|---------|---------|
| \$4,050 | \$4,050 |

**Taxable returns: Adjusted gross income (AGI), income tax,
and tax ratio, 1947- 2014**

| <u>Year</u> | <u>Adjusted gross income (AGI) billions of \$</u> | <u>Income tax in billions of \$</u> | <u>Ratio of tax to AGI</u> | <u>Year</u> | <u>Adjusted gross income (AGI) billions of \$</u> | <u>Income tax in billions of \$</u> | <u>Ratio of tax to AGI</u> |
|-------------|---|---|------------------------------------|-------------|---|---|------------------------------------|
| 1947 | 135.3 | 18.1 | .1336 | 1988 | 2,989.9 | 411.8 | .1377 |
| 1948 | 142.1 | 15.4 | .1087 | 1989 | 3,158.3 | 432.1 | .1368 |
| 1949 | 138.7 | 14.5 | .1049 | 1990 | 3,298.9 | 446.3 | .1353 |
| 1950 | 158.5 | 18.4 | .1160 | 1991 | 3,335.2 | 447.2 | .1341 |
| 1951 | 185.1 | 24.2 | .1309 | 1992 | 3,483.9 | 474.9 | .1363 |
| 1952 | 198.5 | 27.8 | .1401 | 1993 | 3,564.0 | 500.7 | .1405 |
| 1953 | 212.4 | 29.4 | .1386 | 1994 | 3,736.6 | 532.6 | .1425 |
| 1954 | 209.7 | 26.7 | .1272 | 1995 | 4,007.6 | 586.1 | .1462 |
| 1955 | 229.6 | 29.6 | .1290 | 1996 | 4,341.9 | 655.4 | .1510 |
| 1956 | 249.6 | 32.7 | .1312 | 1997 | 4,785.2 | 727.3 | .1520 |
| 1957 | 262.2 | 34.4 | .1312 | 1998 | 5,160.2 | 783.5 | .1518 |
| 1958 | 262.2 | 34.3 | .1310 | 1999 | 5,580.8 | 870.9 | .1561 |
| 1959 | 287.8 | 38.6 | .1332 | 2000 | 6,083.3 | 980.5 | .1612 |
| 1960 | 297.2 | 39.5 | .1330 | 2001 | 5,847.1 | 887.9 | .1519 |
| 1961 | 311.3 | 42.2 | .1356 | 2002 | 5,641.1 | 797.0 | .1413 |
| 1962 | 330.6 | 44.9 | .1358 | 2003 | 5,746.6 | 748.0 | .1302 |
| 1963 | 350.4 | 48.2 | .1376 | 2004 | 6,265.5 | 832.0 | .1328 |
| 1964 | 376.0 | 47.2 | .1254 | 2005 | 6,856.7 | 934.8 | .1363 |
| 1965 | 400.3 | 49.5 | .1209 | 2006 | 7,439.5 | 1,023.9 | .1376 |
| 1966 | 450.2 | 56.1 | .1246 | 2007 | 8,072.3 | 1,115.8 | .1382 |
| 1967 | 487.4 | 62.9 | .1291 | 2008 | 7,583.5 | 1,031.6 | .1360 |
| 1968 | 538.3 | 76.6 | .1424 | 2009 | 6,777.7 | 865.9 | .1278 |
| 1969 | 588.2 | 86.6 | .1472 | 2010 | 7,246.2 | 951.7 | .1313 |
| 1970 | 610.3 | 83.8 | .1370 | 2011 | 7,693.2 | 1,045.5 | .1359 |
| 1971 | 651.3 | 85.2 | .1309 | 2012 | 8,442.2 | 1,188.0 | .1407 |
| 1972 | 717.4 | 93.6 | .1300 | 2013 | 8,426.0 | 1,218.5 | .1446 |
| 1973 | 799.7 | 108.1 | .1350 | 2014 | 9,102.6 | 1,355.3 | .1489 |
| 1974 | 800.2 | 123.7 | .1410 | | | | |
| 1975 | 893.3 | 124.4 | .1385 | | | | |
| 1976 | 1,004.4 | 140.8 | .1402 | | | | |
| 1977 | 1,097.7 | 158.5 | .1444 | | | | |
| 1978 | 1,241.2 | 186.7 | .1504 | | | | |
| 1979 | 1,402.2 | 213.3 | .1521 | | | | |
| 1980 | 1,556.1 | 249.1 | .1601 | | | | |
| 1981 | 1,721.2 | 282.3 | .1640 | | | | |
| 1982 | 1,803.8 | 277.6 | .1539 | | | | |
| 1983 | 1,895.2 | 274.2 | .1447 | | | | |
| 1984 | 2,110.5 | 304.0 | .1440 | | | | |
| 1985 | 2,259.0 | 321.9 | .1425 | | | | |
| 1986 | 2,440.2 | 360.6 | .1478 | | | | |
| 1987 | 2,700.8 | 367.5 | .1361 | | | | |

Source: Annual issues of Individual Income Tax Returns,
Statistics of Income, Internal Revenue Service

Table 1. Employer costs per hour worked for employee compensation and costs as a percent of total compensation: civilian workers, by major occupational and industry group, September 2016

| Compensation component | Occupational group | | | | | | | |
|---|--------------------------|---------|---------------------------------------|------------------|------------------|---------|------------------|------------------|
| | All workers ¹ | | Management, professional, and related | | Sales and office | | Service | |
| | Cost | Percent | Cost | Percent | Cost | Percent | Cost | Percent |
| Total compensation | \$34.15 | 100.0 | \$58.87 | 100.0 | \$24.55 | 100.0 | \$17.79 | 100.0 |
| Wages and salaries | 23.42 | 68.8 | 38.85 | 66.2 | 17.58 | 70.4 | 12.72 | 71.5 |
| Total benefits | 10.73 | 31.4 | 18.01 | 31.0 | 7.38 | 29.6 | 5.07 | 28.5 |
| Paid leave | 2.36 | 6.9 | 4.49 | 7.9 | 1.65 | 6.6 | 0.89 | 5.0 |
| Vacation | 1.15 | 3.4 | 2.17 | 3.8 | 0.82 | 3.3 | 0.42 | 2.4 |
| Holiday | 0.71 | 2.1 | 1.30 | 2.3 | 0.50 | 2.0 | 0.28 | 1.6 |
| Sick | 0.35 | 1.0 | 0.72 | 1.3 | 0.21 | 0.9 | 0.14 | 0.8 |
| Personal | 0.14 | 0.4 | 0.29 | 0.5 | 0.11 | 0.4 | 0.05 | 0.3 |
| Supplemental pay | 1.05 | 3.1 | 2.02 | 3.6 | 0.58 | 2.3 | 0.29 | 1.6 |
| Overtime and premium ⁴ | 0.26 | 0.8 | 0.17 | 0.3 | 0.15 | 0.6 | 0.15 | 0.8 |
| Shift differentials | 0.08 | 0.2 | 0.08 | 0.1 | 0.02 | 0.1 | 0.05 | 0.3 |
| Nonproduction bonuses | 0.74 | 2.2 | 1.77 | 3.1 | 0.42 | 1.7 | 0.09 | 0.5 |
| Insurance | 3.00 | 8.8 | 4.60 | 8.1 | 2.37 | 9.5 | 1.41 | 7.9 |
| Life | 0.04 | 0.1 | 0.08 | 0.1 | 0.03 | 0.1 | 0.02 | 0.1 |
| Health | 2.85 | 8.4 | 4.38 | 7.7 | 2.27 | 9.1 | 1.37 | 7.7 |
| Short-term disability | 0.05 | 0.2 | 0.05 | 0.2 | 0.04 | 0.2 | 0.02 | 0.1 |
| Long-term disability | 0.05 | 0.1 | 0.08 | 0.1 | 0.03 | 0.1 | (⁵) | (⁵) |
| Retirement and savings | 1.78 | 5.2 | 3.35 | 5.9 | 0.90 | 3.8 | 0.79 | 4.4 |
| Defined benefit | 1.11 | 3.2 | 2.08 | 3.7 | 0.44 | 1.8 | 0.64 | 3.6 |
| Defined contribution | 0.66 | 1.9 | 1.27 | 2.2 | 0.46 | 1.9 | 0.15 | 0.9 |
| Legally required benefits | 2.58 | 7.5 | 3.55 | 6.3 | 1.88 | 7.5 | 1.69 | 9.5 |
| Social Security and Medicare | 1.69 | 5.5 | 3.00 | 5.3 | 1.48 | 5.8 | 1.06 | 5.9 |
| Social Security ⁷ | 1.50 | 4.4 | 2.35 | 4.1 | 1.17 | 4.7 | 0.85 | 4.8 |
| Medicare | 0.39 | 1.1 | 0.65 | 1.1 | 0.28 | 1.1 | 0.21 | 1.2 |
| Federal unemployment insurance | 0.03 | 0.1 | 0.02 | (⁶) | 0.04 | 0.1 | 0.04 | 0.2 |
| State unemployment insurance | 0.17 | 0.5 | 0.18 | 0.3 | 0.16 | 0.6 | 0.15 | 0.9 |
| Workers' compensation | 0.47 | 1.4 | 0.37 | 0.7 | 0.23 | 0.9 | 0.44 | 2.5 |

| Compensation component | Occupational group | | | | Industry group | | | |
|---|--|---------|---|---------|------------------------------|---------|--------------------------------|---------|
| | Natural resources, construction, and maintenance | | Production, transportation, and material moving | | Goods-producing ² | | Service-providing ³ | |
| | Cost | Percent | Cost | Percent | Cost | Percent | Cost | Percent |
| Total compensation | \$34.94 | 100.0 | \$27.45 | 100.0 | \$39.02 | 100.0 | \$33.30 | 100.0 |
| Wages and salaries | 23.34 | 66.6 | 18.07 | 65.8 | 25.68 | 66.3 | 22.89 | 69.0 |
| Total benefits | 11.61 | 33.2 | 9.38 | 34.2 | 13.14 | 33.7 | 10.31 | 31.0 |
| Paid leave | 1.86 | 5.3 | 1.84 | 6.0 | 2.63 | 6.5 | 2.33 | 7.0 |
| Vacation | 0.94 | 2.7 | 0.82 | 3.0 | 1.31 | 3.4 | 1.13 | 3.4 |
| Holiday | 0.81 | 1.8 | 0.55 | 2.0 | 0.88 | 2.2 | 0.68 | 2.0 |
| Sick | 0.21 | 0.6 | 0.20 | 0.7 | 0.25 | 0.6 | 0.37 | 1.1 |
| Personal | 0.10 | 0.3 | 0.07 | 0.3 | 0.10 | 0.3 | 0.15 | 0.5 |
| Supplemental pay | 1.03 | 3.0 | 0.99 | 3.6 | 1.49 | 3.8 | 0.97 | 2.9 |
| Overtime and premium ⁴ | 0.71 | 2.0 | 0.68 | 2.0 | 0.89 | 1.5 | 0.20 | 0.6 |
| Shift differentials | 0.05 | 0.1 | 0.08 | 0.3 | 0.08 | 0.2 | 0.05 | 0.2 |
| Nonproduction bonuses | 0.27 | 0.8 | 0.36 | 1.3 | 0.64 | 2.1 | 0.72 | 2.2 |
| Insurance | 3.26 | 9.3 | 2.98 | 10.8 | 3.87 | 9.4 | 2.88 | 8.7 |
| Life | 0.04 | 0.1 | 0.04 | 0.1 | 0.05 | 0.2 | 0.04 | 0.1 |
| Health | 3.11 | 8.9 | 2.82 | 10.3 | 3.47 | 8.9 | 2.75 | 8.2 |
| Short-term disability | 0.05 | 0.2 | 0.05 | 0.2 | 0.08 | 0.2 | 0.05 | 0.1 |
| Long-term disability | 0.03 | 0.1 | 0.08 | 0.2 | 0.05 | 0.1 | 0.04 | 0.1 |
| Retirement and savings | 2.10 | 6.0 | 1.22 | 4.5 | 2.18 | 5.5 | 1.69 | 5.1 |
| Defined benefit | 1.49 | 4.3 | 0.72 | 2.6 | 1.21 | 3.1 | 1.09 | 3.3 |
| Defined contribution | 0.61 | 1.7 | 0.50 | 1.8 | 0.95 | 2.4 | 0.60 | 1.8 |
| Legally required benefits | 3.35 | 9.5 | 2.55 | 9.3 | 3.29 | 8.4 | 2.43 | 7.3 |
| Social Security and Medicare | 1.98 | 5.6 | 1.53 | 5.6 | 2.19 | 5.6 | 1.83 | 5.5 |
| Social Security ⁷ | 1.69 | 4.8 | 1.23 | 4.5 | 1.76 | 4.5 | 1.45 | 4.4 |
| Medicare | 0.36 | 1.1 | 0.30 | 1.1 | 0.43 | 1.1 | 0.38 | 1.1 |
| Federal unemployment insurance | 0.03 | 0.1 | 0.03 | 0.1 | 0.03 | 0.1 | 0.03 | 0.1 |
| State unemployment insurance | 0.25 | 0.7 | 0.18 | 0.7 | 0.23 | 0.6 | 0.18 | 0.5 |
| Workers' compensation | 1.11 | 3.2 | 0.80 | 2.9 | 0.84 | 2.1 | 0.41 | 1.2 |

¹ Includes workers in the private nonfarm economy excluding households and the public sector excluding the Federal government.² Includes mining, construction, and manufacturing. The agriculture, forestry, farming, and hunting sector is excluded.³ Includes utilities; wholesale trade; retail trade; transportation and warehousing; information; finance and insurance; real estate and rental and leasing; professional and technical services; management of companies and enterprises; administrative and waste services; educational services; health care and social assistance; arts, entertainment and recreation; accommodation and food services; other services, except public administration; and public administration.⁴ Includes premium pay (such as overtime, weekends, and holidays) for work in addition to the regular work schedule.⁵ Cost per hour worked is \$0.01 or less.⁶ Less than .05 percent.⁷ Social Security refers to the Old-Age, Survivors, and Disability Insurance (OASDI) program.

Source: Employer Costs for Employee Compensation - September 2016,
U. S. Department of Labor, Bureau of Labor Statistics,
December, 2016

Estimated annual value of household services

| | <u>Hours per week spent in non-market work¹</u> | <u>Hourly wage²</u> | <u>Annual dollar value (2010\$)</u> |
|---------|--|--------------------------------|---|
| MALES | 14.13 | \$10.17 | \$ 7,472 |
| FEMALES | 22.12 | \$10.17 | \$11,698 |

| | <u>Hours per week spent in child care¹</u> | <u>Hourly wage²</u> | <u>Annual dollar value (2010\$)</u> |
|---------|---|--------------------------------|---|
| MALES | 2.89 | \$10.17 | \$ 1,528 |
| FEMALES | 6.42 | \$10.17 | \$ 3,395 |

Sources:

1. "Time Use During the Great Recession", Mark Aguiar, Erik Hurst, and Loukas Karabarbounis, American Economic Review, August, 2013, 103(5): 1664-1696 and Online Appendix.
2. Mean hourly wage, maids and housekeeping cleaners, Occupational Employment and Wages, 2010, Bureau of Labor Statistics, United States Department of Labor.

Curriculum Vitae

Gary M. Crakes

Birthdate: July 2, 1953

Home: 860 Ward Lane
Cheshire, CT 06410

Phone: (203) 272-1205

Fax: (203) 250-8452

Education

Ph.D. (Economics) 1984, University of Connecticut

M.A. (Economics) 1976, University of Connecticut

B.A. (Economics) 1975, Central Connecticut State College

Fellowships and Honors

2017 Biographical listing, Who's Who in America

2004 Honored, Trial Lawyers Care, Association of Trial Lawyers of America,
for pro bono economic services, September 11th Victim Compensation Fund

1998 School of Business Outstanding Teacher Award

1987 University Teacher of the Year Award

1985 Member, State of Connecticut Senior Economist Examination Committee

1983 Richard D. Irwin Fellowship

1983 University of Connecticut Dissertation Fellowship

1975-1976 University of Connecticut Pre-doctoral Fellowship

Professional Organizations

American Economic Association

Eastern Economic Association

Omicron Delta Epsilon

National Association of Forensic Economists

American Academy of Economic and Financial Experts

American Association of University Professors

National Association of Business Economics

Professional Experience

1981 - Economic consultant, Maher, Crakes, and Associates

2011 - Professor Emeritus, Department of Economics and Finance, School of
Business, Southern Connecticut State University

1989 - 2011 Professor, Department of Economics and Finance, School of
Business, Southern Connecticut State University

1991-1995 Chairman, Department of Economics and Finance, School of Business,
Southern Connecticut State University

January 1988-June 1988 Visiting Professor, Department of Behavioral Science
and Community Health, School of Dental Medicine, University of
Connecticut Health Center

September 1985-August 1989 Associate Professor, School of Business, Southern
Connecticut State University (tenured, 1986)

August 1980 - August 1985 Assistant Professor, School of Business, Southern
Connecticut State University

January 1979-May 1980 Instructor, University of Connecticut (Hartford)

June 1976-December 1978 Research Assistant, University of Connecticut Health
Center. Research Assistant, School of Agriculture, University of Connecticut

Publications

Journals

- Crakes, G. and Cottrill, M. "The Connecticut State Income Tax: Progressive, Regressive, and Proportional," Journal of the American Academy of Business, (September, 2007)
- Cottrill, M. and Crakes, G. "A Different Look at "Pay for Performance": Returns to Bench Strength in the NFL," The Business Review, Cambridge, (December, 2004).
- Beazoglou, T., Crakes, G., Doherty, N. and Heffley, D. "Determinants of Dentists' Geographic Distribution," Journal of Dental Education (November, 1992)
- Doherty, N. and Crakes, G. "Estimating the Costs of Public Dental Programs: Mobile Clinics," Community Dental Health (Spring, 1987).
- Crakes, G. "A Comparison of Economic Estimates of Loss with Jury Awards and Pre-verdict Settlements," Business Journal (Fall, 1985).
- Doherty, N. and Crakes, G. "Economic Specification of Cost Estimates in Dental Programs," Journal of Dental Research (June, 1985).
- Doherty, N. and Crakes, G. "Adjusting Social Program Costs for Research and Evaluation Activities," Evaluation Review (August, 1980).
- Doherty, N. and Crakes, G. "Commentary: Reply to Joan Quinn," Inquiry (Summer, 1980).
- Doherty, N., Horowitz, P. and Crakes, G. "Real Costs of Dental Care in Private and Public Practice," Medical Care (January, 1980).
- Doherty, N. and Crakes, G. "The Impact of a Change in Regulation on Costs in an Experimental Program," Inquiry (Summer, 1979).

Proceedings

- Crakes, G. with Cottrill, M. "The Growth of Student Indebtedness and the Role of Higher Education as a U.S. Response to Globalization," Proceedings of the Global Conference on Business & Economics, Association for Business & Economics Research, October, 2007
- Crakes, G. with Cottrill, M. "The Rising Relative Price of Higher Education and the U.S. Response to Offshore Outsourcing," Proceedings of the New England Business Administration Association, May, 2007.
- Crakes, G. with Cottrill, M. "More on "Pay for Performance"-The Disruptive Effect of Star Power in the NFL," Proceedings of the New England Business Administration Association, May, 2005.
- Crakes, G. with Crakes, A. "Education, Earnings, and the NCAA Student Athlete," Proceedings of the New England Business Administration Association, May, 2004.

Crakes, G. with Cottrill, M. and Crakes, J. "Context for the Medical Malpractice Insurance Debate," Proceedings of the Conference on Emerging Issues in Business and Technology, October, 2003.

Crakes, G. with Thorson, J. and Cottrill, M. "The Impact of Law Firm Concentration on Lawyers' Salaries," Proceedings of the New England Business Administration Association, April, 2000.

Crakes, G. with Thorson, J. and Cottrill, M. "Are Baseball Players Overpaid? An Analysis of Major League Baseball Salaries," Proceedings of the Northeast Business & Economics Association, October, 1998.

Crakes, G. with Cottrill, M. "The Connecticut State Income Tax and the Equal Sacrifice Rule," Proceedings of the New England Business Administration Association, November, 1997.

Crakes, G. with Cottrill, M. "Banking It Before the Bar: Legal Compensation Trends in Major Markets," Proceedings of the Northeast Business & Economics Association, September, 1997.

Crakes, G. with Cottrill, M. "Young and Old Scholars," Proceedings of the Eastern Case Writers Association/Eastern Academy of Management, May, 1994.

Abstracts

Crakes, G. and Doherty, N. "Costs of Public Dental Clinics Under Capacity Utilization," Journal of Dental Research (January, 1979).

Technical Reports

Doherty, N., Horowitz, P. and Crakes, G. "Analysis of Economic Factors Associated with Providing Incremental Dental Care to Children" for the National Institute of Health, United States Public Health Service, 1978.

Other

Economic Consultant, 4th edition, 1995, Recovery for Wrongful Death and Injury: Economic Handbook, Stuart M. Speiser and John Maher, Clark, Boardman, & Callaghan, New York, N.Y..

Economic Consultant (with J. Maher), 3rd edition, 1988 Recovery for Wrongful Death and Injury: Economic Handbook, Stuart M. Speiser, Bancroft, Whitney/Lawyers Cooperative Publishing, Rochester, N.Y..

Crakes, G.M. "CSUS Chief's Bonus Appalls," Hartford Courant, December 20, 2009.

Crakes, G.M. "Competition Causing Disagreement Over Deregulation," New Haven Register, August 6, 1981.

Conferences

Papers Presented

Co-author of paper titled "Do Older Workers Respond to Incentives? Evidence From the Senior PGA Tour" (with M. Cottrill and J. Thorson, presenter) presented at the annual Connecticut State University Research Conference, October, 1999, Eastern Connecticut State University.

Presented co-authored paper titled "The Intra and Inter-State Distribution of Dentists" (with T. Beazoglou and D. Heffley) at the annual meeting of the Eastern Economic Association, March 3, 1989 in Baltimore, MD.

Co-author of paper titled "Determinants of Dentists' Geographic Distribution" (with T. Beazoglou and D. Heffley, presenter) presented at the meeting of the American Association of Dental Research, March 15, 1989 in San Francisco, CA.

Presented co-authored paper titled "Estimating Dental Practice Production Functions with Alternative Output Measures" (with T. Beazoglou) at the annual meeting of the Eastern Economic Association, March 4-7, 1987 in Washington, D.C.

Presented paper titled "A Comparison of Economic Estimates of Loss with Jury Awards and Pre-verdict Settlements" at the meeting of the Atlantic Economic Society, August 29 - September 1, 1985 in Washington, D.C.

Presented co-authored paper titled, "A Re-examination of the Returns to Scale of Dental Practices" (with T. Beazoglou) at the annual meeting of the Eastern Economic Association, March 21-23, 1985 in Pittsburgh, PA.

Presented co-authored paper titled "Economic Specification of Costs of Dental Programs" (with N. Doherty) at the annual meeting of the Eastern Economic Association, March 21-23, 1985 in Pittsburgh, PA.

Other

Chairperson of session, "Economics" at the annual meeting of the New England Business Administration Association, April, 1993 in New Haven, CT.

Chairperson and organizer of session, "Health Economics" at the annual meeting of the Eastern Economic Association, March 28, 1992 in New York City, NY.

Discussant of paper titled, "Massachusetts Hospitals in the Eighties: Financial Analysis of Large Urban and Other Hospitals" at the annual meeting of Northeast Business Economics Association, November 7, 1991 in Stamford, CT.

Discussant of paper titled, "Female Work Experience: Voluntary vs. Involuntary Labor Force Activity" at the meeting of the National Association of Forensic Economists, March 4, 1989 in Baltimore, MD

Discussant of paper titled "Diogenes' Expenses: The Costs to the Court of Seeking Truth in Medical Malpractice Cases" at the annual meeting of the Eastern Economic Association, March 12, 1988 in Boston, MA.

Discussant of paper titled "Present Value and the Structure of Interest Rates" at the meeting of the National Association of Forensic Economists, March 11, 1988 in Boston, MA.

Chairperson of session, "Topics in Health Economics" at the annual meeting of the Eastern Economic Association, March 11, 1983 in Boston, MA.

Discussant of paper titled "The Nursing Shortage and Its Associated Planning Problems" at the annual meeting of the New England Business and Economics Association, November 5, 1982 in Springfield, MA.

Coordinator and moderator for "The Role of Preventative Care: Is It a Healthy Alternative?" sponsored by the Joint Council on Economic Education, April 23, 1981, Southern Connecticut State College.